IN THE CLAIMS:

Listing of claims:

1. (original) A method for forming an air bearing surface on a slider, comprising,

providing a silicon slider body;

forming at least one trench in a surface of the silicon body; and

forming a structure selected from the group consisting of a carbide structure and a nitride structure in the at least one trench.

2. (currently amended) A method as in claim 1, wherein the structure comprises [[a]] the carbide structure.

3. (original) A method as in claim 1, further comprising forming at least one of a read element and a write element on the surface after forming the structure.

4. (original) A method as in claim 1, further comprising forming a carbon layer over at least a portion of the silicon body on the surface of the slider.

5. (original) A method as in claim 1, further comprising forming the trench by etching a portion of the silicon body.

6. (original) A method as in claim 2, further comprising forming a layer between the silicon body and the carbide structure.

7. (original) A method as in claim 6, wherein the layer comprises a material comprising titanium.

8. (original) A method as in claim 6, wherein the layer comprises a material that improves adhesion between the carbide and the silicon.

9. (original) A method as in claim 2, wherein the carbide structure is formed by a process comprising:

filling the trench in the silicon body with a metal carbide and anhydrous metal chloride material;

heating the silicon body so that the metal carbide and anhydrous metal chloride material becomes a melt;

after the heating the silicon body, cooling the silicon body to produce a product material from metal carbide and anhydrous metal chloride material; and

removing chloride material formed from the product material.

10. (original) A method as in claim 9, further comprising, after the heating the silicon body so that the metal carbide and anhydrous metal chloride material becomes a melt, annealing the silicon body for a predetermined time period.

11. (currently amended) A method as in claim 9, wherein the removing chloride material comprises rinsing the surface of the material with at least one liquid selected from the group consisting of water and methanol to remove the chloride material.

12. (original) A method as in claim 9, further comprising planarizing the carbide using a method selected from the group consisting of etching and polishing.

13. (original) A method as in claim 12, further comprising etching the silicon slider body so that the carbide extends outward from the etched silicon slider body.

14. (original) A method as in claim 9, wherein the heating the silicon body comprises heating the metal carbide and anhydrous metal chloride material to a temperature of at least 450°C.

15. (currently amended) A method as in claim 1, wherein the structure comprises [[a]] the nitride structure.

16-29. (canceled)